* SWBAT define and apply speed and velocity

Sep 6-2:31 PM

Welcome!!!

SECA Physics
Friday 3 October 2014

Test next week!

H. Leslie Grebe

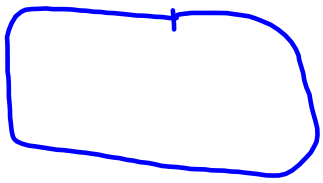
* Pick up:
  - slip of paper (for later)
  - worksheet

Centering...

Video: Math Reaction

Opening Question:

Danica Patrick gets up to speed and then does one lap around the 1-mile track in 18 seconds
Frick says her average speed is 200 mph
Frack says her average velocity is 0 mph
With whom do you agree?



Sep 7-7:04 AM

Catchy Physics Phrases...

Speed is
Change in distance over
change in time

$$\text{SPEED} = \frac{\Delta d}{\Delta t}$$

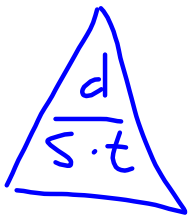
Velocity is
speed and **direction**

TMBG - speed and velocity
http://www.youtube.com/watch?v=DRb5PSxJerM

Oct 4-7:27 AM

Worksheet:

~ 10 minutes on your own
- Think about the questions. At least guess!



$$S = \frac{d}{t}$$

IF I RUN 100 m (DIST) AND MY SPEED IS 5 m/s (SPEED), HOW LONG DID IT TAKE

$$t = ? = \frac{d}{S} = \frac{100\text{m}}{5\text{ m/s}} = 20\text{s}.$$

Oct 5-8:33 AM

Speed and Velocity...

What in your car tells you speed?

SPEDOMETER

What in your car could tell you velocity?

SPEDOMETER & COMPASS, GPS

Which is a vector: speed or velocity?

A horse runs 30 meters in 3 seconds. What is its speed?

$s = \frac{d}{t} = \frac{30\,m}{3\,s} = 10\,\frac{m}{s}$

If a newt goes an average speed of 1 centimeter per second, how far does it go in 60 seconds?

$d = s \cdot t = 1\,\frac{cm}{s} \cdot 60\,s = 60\,cm$

An airplane travels due north for 1000 kilometers in 2 hours. What is its velocity?

$s = \frac{d}{t} = \frac{1000\,km}{2\,hr} = 500\,\frac{km}{h}$ NORTH

What is the ~~velocity~~ speed if the plane travels 500 kilometers in 1 hour?

NORTH

$\frac{1000}{2} = \frac{500}{1} = 500\,km/h$

Oct 5-8:37 AM

Daily 3 Questions

CP HMWK: NOTE SHEET FOR TUES.

* Every day except test/project days
* 3 Questions on the topics of the day
* Main source of daily points
* I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. A horse runs 30 meters in 3 seconds. What is its speed?

10 m/s

2. Which is a vector: speed or velocity?

VELOCITY

3. Speed =
   A. distance / time
   B. time / distance
   C. distance x time

Sep 14-7:28 AM